

Abstract of the Disclosure

Provided is an apparatus for processing sewage by granulating activated sludge and a method thereof. The sewage processing apparatus includes an anaerobic granulation tank for granulating suspended microorganisms; a first transport pipe for transporting supernatant of the anaerobic granulation tank except the sludge granulated in the anaerobic granulation tank; an indirect aeration tank for supplying oxygen to the supernatant transported through the first transport pipe; a second transport pipe for transporting aqueous solution saturated with dissolved oxygen; an aerobic granulation tank for granulating suspended microorganisms; a third transport pipe for transporting supernatant of the aerobic granulation tank to the anaerobic granulation tank except the sludge granulated in the aerobic granulation tank; and a discharge pipe for discharging supernatant of finished water obtained after circulating a series of the anaerobic granulation tank, the first transport pipe, the indirect aeration tank, the second transport pipe, the aerobic granulation tank, and the third transport pipe repeatedly.